

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

OMAX CORPORATION, a Washington
corporation,

Plaintiff,

v.

FLOW INTERNATIONAL
CORPORATION, a Washington corporation,

Defendant.

FLOW INTERNATIONAL
CORPORATION, a Washington corporation,

Counterclaimant,

v.

OMAX CORPORATION, a Washington
corporation,

Counterclaim Defendant.

Case No. C04-2334L

CLAIM CONSTRUCTION

I. Introduction

The case before the Court consists of a claim by OMAX Corporation (“Omax”) against Flow International Corporation (“Flow”) for the infringement of its patents for controlling motion in machine tools and industrial robots, U.S. Patent No. 5,508,596 (“the ‘596 patent”) and

CLAIM CONSTRUCTION

1 its continuation patent, U.S. Patent No. 5,892,345 (“the ‘345 patent”). Flow counterclaimed
2 against Omax for infringement of its patents for controlling similar devices, U.S. Patent No.
3 6,766,216 (“the ‘216 patent”) and its continuation patent, U.S. Patent No. 6,996,452 (“the ‘452
4 patent”). The complaint and counter complaint include a number of other issues, but none is
5 relevant to the instant claim construction.

6 **II. Relevant Law**

7 On patent issues, this Court applies the law of the Federal Circuit. In re Cambridge
8 Biotech Corp., 186 F.3d 1356, 1368 (Fed. Cir. 1999). The Federal Circuit and Supreme Court
9 have set forth a two-step analysis to determine whether a device infringes a patent. Markman v.
10 Westview Instruments, Inc., 517 U.S. 370, 384–91 (1996). First, the Court determines as a
11 matter of law the proper construction of the asserted patent claims. Id. Second, the fact finder
12 determines whether the accused devices infringe on the claims. Id.

13 In this first step, the Court must construe the language of the patent claims as would “a
14 person of ordinary skill in the art at the time of the invention.” Innova/Pure Water, Inc. v. Safari
15 Water Filtration Sys., 381 F.3d 1111, 1116 (Fed. Cir. 2004). The Court may seek guidance from
16 the intrinsic evidence (the words used in the claims themselves, language in the rest of the
17 specification, and the prosecution history) and extrinsic evidence (expert testimony,
18 publications, treatises and dictionaries). See Markman v. Westview Instruments, Inc., 52 F.3d
19 967, 979 (Fed. Cir. 1995). Although extrinsic evidence may be used if the Court considers it
20 helpful, it is generally considered less reliable. Phillips v. AWH Corp., 415 F.3d 1303, 1318
21 (Fed. Cir. 2005).

22 The claim construction process must not invade the province of the jury. SRI Int’l v.
23 Matsushita Elec. Corp., 775 F.2d 1107, 1118 (Fed. Cir. 1985) (“A claim is construed in the light
24 of the claim language, the other claims, the prior art, the prosecution history, and the
25 specification, not in light of the accused device.”). As such, the Court will not construe the
26

27 CLAIM CONSTRUCTION

claims so elaborately as to pre-ordain the jury's infringement determination. Wilson Sporting Goods Co. v. Hillerich & Bradsby Co., 442 F.3d 1322, 1331 (Fed. Cir. 2006) (“[T]he rule forbids a court from tailoring a claim construction to fit the dimensions of the accused product or process and to reach a preconceived judgment of infringement or noninfringement.”). The Court takes special notice of this rule in the instant case, where the presence of claims and counterclaims between two competing infringing devices has provided the Court with the opportunity and ability to construe the claims in reference to the allegedly infringing devices. Moreover, the parties' proposed constructions invariably promote this approach. The Court's constructions, however, will allow for the jury's infringement determinations.

III. Infringement Claims

A. Infringement of '596 and '345 (by Flow)

Omax alleges that the iterations of Flow's waterjet controlling software, Flowmaster, infringe on all of the claims set forth in Omax's two patents.¹ This allegation is based on Omax's belief that Flow's "Flowmaster" products infringe on all of the elements of the claims set forth in claims one, nine, fourteen and twenty-three of the '596 patent. These claims are the main method and system claims that describe the waterjet cutting tool. All of the remaining claims, except claim twenty-two, are method and system claims that are dependent on claims one and fourteen. The single claim of the '345 patent is a combination of elements from claims one and nine, and Omax alleges its infringement for largely the same reasons.

B. Infringement of '216 and '452 (by Omax)

Flow alleges in its counter claims that Omax's systems that incorporate its "Intelli-MAX" software and "Tilt-A-Jet" technology may infringe on all of the over two-hundred claims set forth in both its patents.

IV. Claim Construction

¹ Omax dropped claim 22 later in the proceedings. Dkt. # 139.

The claim charts submitted by the parties occasionally propose constructions to which the parties appear to agree. The Court will adopt these constructions for the purpose of this claim construction. The claim charts also identify a total of 39 claims that are allegedly disputed. The parties' Markman briefs and the subsequent Markman hearing, however, address far fewer terms. Many of the terms that are not discussed contain only minor differences, which the parties may resolve prior to the infringement phase either by stipulation or further briefing. The instant claim construction order is limited to the claims that are identified as the subject of substantial dispute between the parties.

A. U.S. Patent No. 5,508,596

1. “quality of result” or “desired quality of result” (claims 9 and 23, respectively)

Omax proposes that the Court adopt the following construction:

Desired quality of result means and includes any characteristic(s) of a part or other work piece that a user desires to result from operation upon the work piece of a machine tool following a desired trajectory. These characteristics include surface finish and dimensional accuracy and precision, as well as uniformity of cut surface. More specific examples include: accuracy in cutting curves; accuracy as to the desired depth of a cut when cutting only partially through a workpiece; and avoidance of any of the following: undesirable marks or troughs, rounding of sharp corners, excessive kerf width; excessive taper, errors (beyond desired tolerance limits) caused by jet lag; deflection of the jet into areas not intended to be cut; and failure to cut portion intended to be cut.

Flow proposes the following construction: “The relative grade of cut surface finish of a work piece (specified by the user) that is cut at a speed just fast enough to cut through a work piece having a virtual thickness equal to or greater than the actual thickness of the material being cut, the grade of quality increasing as the virtual thickness of the material increases. Quality of result does not include dimensional tolerance or precision (e.g. error).” The first parenthetical is included where the construed phrase includes the term “desired.”

This claim appears in the following context: “9. A method for determining tool motion control commands for operation of a machine tool on a desired trajectory to achieve a desired quality of result” ‘596 Patent, col. 17, ll. 14–16. The term “quality of result” or “quality”

1 appears throughout the specification, as well, including the following:

2 The resulting *finish* is assigned a quality of 1. The top half of a material that has
3 just barely been cut through has a much better *surface finish* than the bottom half.
4 If the speed is reduced so that the jet could just cut through a piece twice as thick,
5 the *surface finish* is much better. This finish is assigned a quality of 2. Moving
slowly enough to cut more than 5 times the material thickness does not
significantly improve the *finish*. Therefore, quality 5 is regarded as the best *finish*
possible.

6 ‘596 Patent, col. 14, ll. 58–67 (emphasis added). This explanation in the patent specification
7 appears to suggest that the quality value (Q) relates exclusively to the resulting finish of the
8 piece that is cut. Flow relies heavily on this passage to argue that “quality of result,” as used in
9 the claims, is either ambiguous or refers to a single feature of quality: surface finish. Flow
10 argues that the Court should defer to the term as defined by the patentee in this passage.
11 Johnson Worldwide Assocs. v. Zebco Corp., 175 F.3d 985, 990 (Fed. Cir. 1999) (requiring “the
12 entry of a definition of a claim term other than its ordinary and accustomed meaning [when] the
13 patentee has chosen to be his or her own lexicographer by clearly setting forth an explicit
14 definition for a claim term”).

15 Omax concedes that the above-quoted passage focuses exclusively on the finish of the
16 cut, but argues that Flow relies on that passage to the exclusion of many passages that address
17 other aspects of quality. For example, the claim terms frequently refer to the “uniformity of
18 resulting cut surface.” ‘596 Patent, claim 10, 11. The claims also refer to a method for which
19 the goal is to “limit lag error.” ‘596 Patent, claim 12. The specification frequently refers to both
20 the surface finish *and* the “precision” of the cut. E.g., ‘596 Patent, col. 7, l. 31. Other
21 references to characteristics of quality include tapering, troughs, marks, and excessive kerfs,
22 issues that arise in the context of the regularity of speed and the traversing of curves and corners.
23 ‘596 Patent, col. 14, ll. 30–53, col. 15, l. 40—col. 16, l. 10. These references make clear that
24 the passage referring only to surface finish is only an exemplary, and not limiting, embodiment.
25 See Phillips, 415 F.3d at 1323 (reiterating the requirement to “avoid the danger of reading

26
27 CLAIM CONSTRUCTION

1 limitations from the specification into the claim”).

2 The Court finds that this claim term and its use in the patent do not support the narrow
3 reading proposed by Flow. First, it is clear that contrary to Flow’s argument, Dr. Olsen never
4 “acted as his own lexicographer” in regards to “quality,” nor defined it exclusively as surface
5 finish. According to Flow’s approach, if quality does not refer only to surface finish, then it is
6 ambiguous beyond retrieval. This argument is unpersuasive. While the patent’s construction of
7 “quality” does not reach the exacting specificity proposed in Flow’s construction, it is clear that
8 quality or “cut quality” refers to a variety of characteristics that are recognizable by all experts
9 of ordinary skill in the art. Flow’s expert, Dr. Garris, does not deny that issues like lag are
10 related to quality, but limited his argument largely to the notion that an individual of ordinary
11 skill in the art would have read the passage quoted above and assumed that quality for the
12 purpose of the patent focused only on surface finish. Finding this argument unavailing, the
13 Court adopts the following construction: “Quality of result refers to any number of features or
14 characteristics of a cut, including but not limited to surface finish, uniformity of cut surface,
15 precision and dimensional accuracy. A user specifies his or her *desired* quality of result using
16 an associated value.”

17 **2. “an associated value representing a desired quality of result” (claims 9 and 23)**

18 Omax proposes that this phrase “means a value that itself represents desired quality of
19 result, and that can be specified by selecting any numeric, verbal, pictorial or other symbol
20 representing such desired quality, (and which value is stored in computer memory, and is a value
21 that a computer mathematically combines, with one or more other parameters which affect(s) the
22 quality of result, to determine motion control commands provided to the machine tool to adjust
23 velocity or acceleration to achieve the desired quality of result).” Omax continues by noting that
24 an “associated value representing a desired quality of result can be expressed as a so-called
25 ‘percentage of speed’ if it meets the criteria stated above. It cannot, however, be an actual speed
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27 CLAIM CONSTRUCTION

1 stated in distance/time if such speed specification causes the machine tool to move strictly at the
2 specified speed, without adjustment of the speed to achieve the desired quality of result.”
3 Flow’s proposed construction is as follows: “A single number that directly represents finished
4 surface quality itself; but cannot be a variable that affects the finished surface quality such as a
5 number related to velocity (e.g. normalized speed or percentage speed scale) or material
6 thickness.”

7 The parties’ central dispute is how the value that is inputted by the user “represents” the
8 quality of result that is desired by the user. Flow alleges that this claim was plainly defined
9 during the claim prosecution, when Omax differentiated from prior art by declaring:

10 However, neither Cutler, nor any other cited art, suggests that the number which
11 should be stored should represent finished surface quality itself rather than any one
12 of many factors which contributes to surface quality. In the claimed invention, a
single value is stored which value represents directly the quality of result.

13 FLO 2268–69. Therefore, Flow argues, the absence of the word “directly” in Omax’s proposed
14 construction, and their effort to include “normalized speed” in their definition, is an effort to
15 retrieve ground lost during claim prosecution. Schriber-Schroth Co. v. Cleveland Trust Co., 311
16 U.S. 211, 220–21 (1940) (“It is a rule of patent construction consistently observed that a claim in
17 a patent as allowed must be read and interpreted with reference to claims that have been
18 cancelled or rejected, and the claims allowed cannot by construction be read to cover what was
19 thus eliminated from the patent.”).

20 Omax, of course, disputes this characterization of its statement during the prosecution.
21 The context of the disclaimer was the Cutler prior art, which required an operator to enter
22 velocities of the cutter in surface feet per minute and inches of feed per spindle revolution.
23 These velocity values were typically derived in reliance on a chart that proposed different speeds
24 based on desired quality. Omax was attempting to distinguish the previous system by explaining
25 that the value was not a velocity, but rather the quality level itself. It used the word “directly” to
26 emphasize this difference, and not to distinguish its claim from any claim where the input

27 CLAIM CONSTRUCTION

1 “inferred” quality. There is no unequivocal disavowal of a variable inputted into an equation
2 which infers quality, so long as it is not an actual velocity. See Omega Eng’g, Inc. v. Raytek
3 Corp., 334 F.3d 1314, 1325–26 (“Consequently, for prosecution disclaimer to attach, our
4 precedent requires that the alleged disavowing actions or statements made during prosecution be
5 both clear and unmistakable.”). Thus, Omax’s patent prosecution statement must be construed
6 in the proper context—distinguishing the new method from the Cutler prior art.

7 The Court is persuaded by Omax’s expert’s representation that “representing” has no
8 specialized meaning in the art that would require the explicit exclusion of Flow’s method.
9 Hutchins’s ‘596 Expert Report at 15 (“[I]t is my opinion that in this context the term ‘represents’
10 would reasonably be understood by a person of ordinary skill as meaning ‘symbolizes’ or
11 ‘stands for.’”). In its ordinary and customary meaning, and as used in the claim specification,
12 the “value representing quality of result” is a variable that relates to or infers the ultimate quality
13 of the piece that is cut. It is one of a number of factors included in a formula that ultimately
14 dictates how the cutting head behaves.

15 Pursuant to the rules of claim construction, the Court will not determine infringement
16 through its claim construction; instead, the Court will adopt a construction of this claim term
17 without reference to Flow’s “percentage” or “normalized” speed. Whether Flow’s formula and
18 input method infringe on Omax’s patent will be a jury question. The claim will be construed as
19 follows: “One value from a range of values representing the quality of a cut. This value is
20 inputted into an equation containing other values that reflect characteristics of the task that will
21 impact the quality of the cut, such as material type.”

22 **3. “combining the associate value and the additional parameter to determine**
23 **motion control commands” (claims 9 and 23)**

24 Omax proposes to construe this phrase to mean “a computerized, mathematical
25 combination of the associated value and the additional parameter to determine motion control
26 commands provided to the machine tool to automatically adjust velocity or acceleration to

27 CLAIM CONSTRUCTION

1 achieve the desired quality of result.” Flow argues that the phrase should be construed to mean
 2 “the mathematical combination of the associated value and the additional parameter to calculate
 3 the velocity (U) for a segment. It is insolubly ambiguous as to how the patented system utilizes
 4 the resultant velocity (U) for the segment to determine the incremental instructions to be sent
 5 directly to the machine tool.”

6 Flow’s proposed construction of this claim term has many shortcomings. First, by
 7 describing the claim as “insolubly ambiguous,” the construction renders the claim invalid,
 8 despite the existence of a valid, equally plausible interpretation of the claim term. Modine Mfg.
 9 Co. v. U.S. Int’l Trade Comm’n, 75 F.3d 1545, 1557 (Fed. Cir. 1996) (“When claims are
 10 amenable to more than one construction, they should when reasonably possible be interpreted so
 11 as to preserve their validity.”), abrogated on other grounds, Festo Corp. v. Shoketsu Kinzoku
 12 Kogyo Kabushiki Co., Ltd., 234 F.3d 558 (Fed. Cir. 2000) (en banc). Second, Flow arrives at
 13 its construction improperly by importing an embodiment described in the specification, the
 14 formula at col. 15, l. 9, to limit the terms of the claim to only providing for velocity along a
 15 straight line. Phillips, 415 F.3d at 1323. Finally, Flow’s proposed construction contradicts
 16 other claim terms, which claim a method that adjusts velocity *and* acceleration, for the purpose
 17 of, among other things, improving dimensional accuracy around corners and curves. See, e.g.,
 18 ‘596 Patent, claim 13; see also, Phillips, 415 F.3d at 1316 (requiring clear, intentional disclaimer
 19 to limit claim term). The Court adopts Omax’s proposed construction of this claim, which is
 20 consistent with its ordinary meaning.

21 **4. “uniformity of resulting cut surface” (claims 10, 11, 12, 13, 24, 25, 26 and 27)**

22 Omax proposes that this should be construed to include “any aspect of uniformity for a
 23 cut surface, for example consistency of surface finish or of dimensional accuracy or precision
 24 from entry to exit of the jet through a work piece for the segment specified by the user.” Flow
 25 proposes to use this construction: “Consistency of the surface finish from entry to exit of the jet
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27 CLAIM CONSTRUCTION

1 through a work piece for the segment specified by the user.”

2 For its argument, Flow relies on its proposed narrow constructions of quality of result,
3 associated value and combining. The Court has largely rejected these narrow constructions in
4 favor of a broad definition of quality of result and an interpretation of the combining step that
5 allows for consideration of dimensional accuracy, such as kerf and lag. Moreover, the claim
6 terms specifically refer to the uniformity of the resulting cut surface with regard to dimensional
7 accuracy. ‘596 Patent, claim 12 (“The method of claim 10 wherein the velocity is adjusted to
8 limit lag error when the jet traverses a curve or corner to maintain the desired uniformity of
9 resulting cut surface.”). In light of these findings, the Court adopts Omax’s proposed
10 construction of this claim term.

11 **5. “a drive circuit for the motor” (claims 1, 14, 22)**

12 Omax proposes that this phrase should be construed as the “portion of a machine tool that
13 receives motor commands and electronically controls motor functions. It may or may not
14 include one or more controllers that interpret and adjust motor commands.” Flow’s
15 interpretation uses the same first sentence, and then continues: “The drive circuit may contain a
16 force command interpreter, a position command differentiator, or a position command
17 interpreter, as defined in the patent. The drive circuit does not include add-in cards or
18 intermediate command interpreting controllers.”

19 This Court already has concluded that “the specification as a whole does not suggest ‘that
20 the very character of the invention requires the [direct connection] limitation [suggested by
21 defendant] to be part of every embodiment.’” Order, Dkt. # 52 at 6 (quoting Alloc, Inc. v. Int’l
22 Trade Comm’n, 342 F.3d 1361, 1370 (Fed. Cir. 2003)). Flow has attempted to account for this
23 conclusion by suggesting that the claim be construed as allowing certain intermediate
24 connectors, but not the add-in card or other controllers that are the hallmark of the Flow device.
25 The Court continues to hold that the character of the invention does not require the absence of
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27 CLAIM CONSTRUCTION

the intermediate steps that Flow attempts to preclude through its proposed construction. The Court therefore adopts Omax's proposed construction.

6. "motion control commands" (claims 9 and 23)

Omax proposes this construction: "Instructions to a machine tool that cause it to move." Flow argues for the following: "Time delay and incremental instruction consisting of a series of step and direction commands consisting of either a 1 or 0 with a sign of + or - that effect movement." Flow's proposed construction mirrors its proposed construction of the claim terms in claims 1 and 14, which refers to "a series of incremental motor commands for the motor, each increment for the motor being one of: zero, positive increment, or negative increment."² The Court agrees with Omax's argument that this approach violates the principle of claim differentiation. Comark Commc'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998) ("There is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims."). The patent consistently refers to the incremental motion control commands in claims 1 and 14, and consistently refers only to motion control commands in claims 9 and 23. Moreover, Flow's proposed construction contradicts the intrinsic evidence available in the prosecution history of the '596 patent: "Claim 12 [which later became claim 9] is similar to Claim 1, except that the limitation that the segments are incremental motor commands is eliminated." FLO 002008-13. Accordingly, the Court adopts Omax's proposed construction.

7. Means-plus-function claims

The parties propose to allow the Court to construe eight means-plus-function claims without the benefit of briefing. Instead, the parties have provided a legal framework and

² The parties' slightly divergent constructions of this claim, addressed in the joint claim chart, are not addressed in their Markman briefs.

1 incorporated by reference its claim charts and expert reports.³ The parties should make
2 arrangements to brief their proposed constructions in light of Federal Circuit precedent and the
3 claim constructions in this order.

4 **C. U.S. Patent No. 6,766,216**

5 **1. “automatically” or “automated” (claim 1)**

6 Flow argues that this term should be construed as “performed without manual
7 intervention.” Omax acknowledges in its Markman brief that “this is generally the ordinary
8 meaning of the term,” but argues in the joint claim chart that this phrase “should be construed
9 against Flow depending on the circumstances.” In its Markman brief, Omax proposes that the
10 Court find this term to be invalid or adopt a narrow construction of this term: “on-the-fly, in real
11 time.”

12 Omax’s arguments for finding the term invalid lack merit. Omax seizes on a number of
13 apparently contradictory references to the claim term to argue that the term is indefinite and
14 therefore the claim invalid. Flow’s alleged contradictions, however, would not affect the ability
15 of an individual of ordinary skill in the art to understand the meaning of the term as used in the
16 patent. Moreover, it is far from apparent that Flow has ever defined the term “automatically,” as
17 used in claim 1, as anything other than “performed without manual intervention.”⁴ In light of
18 Omax’s acknowledgment that this is how someone of ordinary skill in the art would interpret
19 this term, the Court adopts this construction.

20 **2. “dynamically” (claim 1)**

21 _____
22 ³ This approach may have been used because the parties faced page limitations that were
23 exacerbated by the decision to identify close to forty terms for claim construction, instead of the
24 requested ten. See Minute Order Setting Trial Date and Related Dates, at 4, Dkt. # 14.

25 ⁴ Omax’s proposed definition for this term seems far more fitting as a definition of
26 “dynamically.” This adds credence to Dr. Garriss’s argument that the prosecution history relied
27 on by Omax refers to the static vs. dynamic issue, not the definition of automatically.

Flow proposes that this claim term means a “potentially changing activity or item, such as changing under variable process conditions, as contrasted with static.” Omax largely agrees with this construction, but argues that this definition must not include “Omax’s static processes, where all calculations are done in advance then the fully determined motion commands are exported to the controller for actual machining.” The Court again finds that the parties do not manifest a meaningful dispute on this issue, and adopts Flow’s construction. The jury will determine the question of infringement.

3. “receiving an indication of a speed” (claim 1)

Flow proposes that this phrase should be construed as: “To acquire a value related to speed, such as supplied by a computer system.” Omax agrees generally, but argues that “related to speed” changes the meaning of the claim term and, moreover, is equally ambiguous. Omax proposes instead that the term “speed” be specifically construed as “distance per unit time.”

Omax’s expert endorses this approach, but fails to note that in the claim term, the word “speed” is preceded by the words “an indication of.” These words support the use of the more general construction proposed by Flow. Their inclusion would signal to someone of ordinary skill in the art that the value acquired by the computer system might not be an actual velocity, in distance per time, but something more generally related to speed. Omax is correct, however, that “related to” opens up the realm of possibilities too far, at the risk of the inclusion of every aspect of the cutting process, such as the “nozzle orifice diameter.” Instead of introducing a new term to the claim construction, the Court finds the term “indicating” to be adequately understandable by a lay jury. See Phillips, 415 F.3d at 1314. As such, the Court will construe the claim term as: “To acquire a value indicating speed, such as supplied by a computer system.”

4. “in accordance with” (claim 1)

Flow contends that this phrase does not require construction, but that if it did, the construction should be “in conformity with.” Omax seems to agree that this phrase is properly

1 construed as “in conformity with,” but proposes also to add language to indicate that this phrase
2 is more general than, and includes, the phrase “as a function of,” which appears in claims 14–17.
3 Omax does not argue that there is any dispute about these definitions, nor that there might be
4 any confusion. Therefore, there is no reason to include the additional information proposed by
5 Omax. The Court adopts Flow’s construction: “in conformity with.”

6 **5. “the orientation parameter for each of the two successive entities are the**
7 **same” (claim 4)**

8 Flow proposes this construction: “The orientation parameter is the same from one entity
9 to the next. The value changes, not the type of parameter.” Omax seemed to agree in the joint
10 claim chart, but now argues that the claim should be construed simply as “the parameters are the
11 same.” Omax argues that the term “values” should not be inserted, as it adds limitations not
12 found in the claim. However, the parties already agreed that the claim term “orientation
13 parameter” should be construed as “a value designating the alignment of the cutting head relative
14 to the material being cut.” ‘216 Patent Joint Claim Chart, Item 15. Because this term already is
15 defined, the only remaining undefined claim terms are “for each of the two successive entities.”
16 The parties appear to largely agree that this phrase can be designated as “from one entity to the
17 next.”⁵ Thus, the Court adopts Flow’s construction, without the second sentence. The
18 construction will read: “The orientation parameter is the same from one entity to the next.”

19 **6. “determined speed” (claim 7)**

20 Flow proposes that this phrase be construed as “the indicated speed for the respective
21 geometric entity.” In its Markman brief, Omax states that this construction is “nonsensical,” but
22 that it “will not dispute Flow’s definition.” The Court adopts it as well for the purpose of this
23 claim construction.

24 **7. “forwarding the motion program” (claim 9)**

25 ⁵ Omax originally signaled its agreement with this formulation in the joint claims chart.

Flow argues that this phrase means “sending or transmitting the motion program from one location to another within the computer system.” Omax accepts this definition and the Court will adopt it for the purpose of this claim construction as well.

8. “(the predictive model indicates values for at least one of lead angles and taper angles) as a function of values of speed” (claim 14)

Flow argues that this should be construed as follows: “The predictive model establishes either a value for a taper angle and/or a value for a lead angle using a speed value.” Omax contends that it means “calculating or determining lead or taper angles based on mathematical equations, look up tables, etc., that include the speed of the cutting tool during the cut to produce the target piece.” Omax also suggests that the parties are not actually in dispute on this claim term. If this is so, the Court will not rule on this issue. The parties may re-raise the issue if there is a dispute.

9. “dynamically modifiable library of code” (claim 20)

Flow argues that this phrase should be construed as a “potentially changeable code in a collection of code.” Omax argues that this phrase appears “to indicate a group of source code that is modifiable on the fly in real time by the user.” The Court construes the term “dynamically” consistent with its prior definition of the term, and therefore adopts Flow’s proposed construction.

D. U.S. Patent No. 6,996,452

1. “determining and generating motion instructions that are adjusted to compensate for lead or taper errors” (claims 1 and 16)

Flow argues for the following construction: “Creating movement directives that compensate for lead and taper errors. Adjusting does not require readjusting after the motion control commands have been determined and generated (e.g. after the program is built and sent for execution).” Omax argues that it should be understood to mean: “the motion control commands are changed or altered after having been determined and generated.”

1 The argument here stems from the meaning of the word adjusted. Flow argues that the
2 determining and generating process “adjusts” the instructions so that, when that process is done,
3 they are already “adjusted” to compensate for errors. Omax argues that adjusted means
4 modified, and suggests that after the instructions are determined and generated, they are *then*
5 adjusted to compensate. Contrary to Omax’s argument, both uses of this word constitute “plain
6 meaning”: “**adjusted** *adj* 1 a: accommodated, altered or revised to suit a particular set of
7 circumstances or requirements b: having achieved a harmonious relationship with the
8 environment or with other individuals.” Webster’s Third New International Dictionary 27
9 (1981). Because both approaches are consonant with the word’s plain meaning, the Court looks
10 to the specification for guidance. Phillips, 415 F.3d at 1313 (“[T]he person of ordinary skill in
11 the art is deemed to read the claim term not only in the context of the particular claim in which
12 the disputed term appears, but in the context of the entire patent, including the specification.”).

13 The specification supports Flow’s approach, which construes “adjusted” as signifying
14 that the motion instructions are already adjusted upon their determination and generation.
15 According to the specification, after the “optimal values for the taper and lead angles at each
16 endpoint of each drawing entity as a function of the speed of the cutting head at that point” are
17 generated, the Dynamic Waterjet Control System (“DWCS”) then “builds the final motion
18 program making adjustments to the motion program data structure as necessary for the particular
19 jet controller in use.” ‘452 Patent, col. 8, ll. 2–21. In figure 5 of the ‘452 patent, the building
20 process occurs in step 507, and afterward instructions are sent to the controller for execution.
21 Thus, there is no adjustment after the determination and generation of the instructions. The
22 Court adopts Flow’s proposed construction.

23 V. Conclusion

24 The claim terms shall be construed in accordance with this order. Constructions agreed
25 upon by the parties shall be construed for the purpose of this action as agreed by the parties.
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27 CLAIM CONSTRUCTION

1 Claim terms that remain in dispute, but were not discussed in the parties' Markman briefs, may
2 be raised in a later submission to the Court, with proposed constructions not inconsistent with
3 the constructions herein.

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5 DATED this 7th day of November, 2006.

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8 Robert S. Lasnik
9 United States District Judge
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27 CLAIM CONSTRUCTION
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